

SEQUENCE LISTING

<110> TAM, Cherk Shing

<120> BONE STIMULATING FACTOR

<130> 32404-2054

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<150> US 09/229,304

<151> 1999-01-13

<150> US 048,058

<151> 1998-03-26

<150> PCT/CA96/00653

<151> 1996-09-26

<150> US 60/004,314

<151> 1995-09-26

<160> 9

<170> MSWord

<210> 1

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 1

Ala	Glu	Leu	Arg	Cys	Met	Cys	Ile	Lys	Thr	Thr	Ser	Gly	Ile	His	Pro
1				5					10					15	

Lys	Asn	Ile	Gln	Ser	Leu	Glu	Val	Ile	Gly	Lys	Gly	Thr	His	Cys	Asn
		20						25					30		

Gln	Val	Glu	Val	Ile	Ala	Thr	Leu	Lys	Asp	Gly	Arg	Lys	Ile	Cys	Leu
		35					40					45			

Asp	Pro	Asp	Ala	Pro	Arg	Ile	Lys	Lys	Ile	Val	Gln	Lys	Lys	Leu	Ala
	50						55					60			

Gly	Asp	Glu	Ser	Ala	Asp
65					70

<210> 2

<211> 75

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 2

Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr
1 5 10 15

Ser Gly Ile His Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys
20 25 30

Gly Thr His Cys Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly
35 40 45

Arg Lys Ile Cys Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val
50 55 60

Gln Lys Lys Leu Ala Gly Asp Glu Ser Ala Asp
65 70 75

<210> 3

<211> 74

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 3

Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser
1 5 10 15

Gly Ile His Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly
20 25 30

Thr His Cys Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg
35 40 45

Lys Ile Cys Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln
50 55 60

Lys Lys Leu Ala Gly Asp Glu Ser Ala Asp
65 70

<210> 4

<211> 73

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 4

Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr Ser Gly
1 5 10 15
Ile His Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys Gly Thr
20 25 30
His Cys Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly Arg Lys
35 40 45
Ile Cys Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val Gln Lys
50 55 60
Lys Leu Ala Gly Asp Glu Ser Ala Asp
65 70

<210> 5

<211> 81

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 5

Gly Lys Glu Glu Ser Leu Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys
1 5 10 15
Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln Ser
20 25 30
Leu Glu Val Ile Gly Lys Gly Thr His Cys Asn Gln Val Glu Val Ile
35 40 45
Ala Thr Leu Lys Asp Gly Arg Lys Ile Cys Leu Asp Pro Asp Ala Pro
50 55 60
Arg Ile Lys Lys Ile Val Gln Lys Lys Leu Ala Gly Asp Glu Ser Ala
65 70 75 80
Asp

<210> 6

<211> 85

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 6

Asn	Leu	Ala	Lys	Gly	Lys	Glu	Glu	Ser	Leu	Asp	Ser	Asp	Leu	Tyr	Ala
1				5					10					15	

Glu	Leu	Arg	Cys	Met	Cys	Ile	Lys	Thr	Thr	Ser	Gly	Ile	His	Pro	Lys
			20					25					30		

Asn	Ile	Gln	Ser	Leu	Glu	Val	Ile	Gly	Lys	Gly	Thr	His	Cys	Asn	Gln
		35						40					45		

Val	Glu	Val	Ile	Ala	Thr	Leu	Lys	Asp	Gly	Arg	Lys	Ile	Cys	Leu	Asp
	50						55				60				

Pro	Asp	Ala	Pro	Arg	Ile	Lys	Lys	Ile	Val	Gln	Lys	Lys	Leu	Ala	Gly
65					70					75					80

Asp	Glu	Ser	Ala	Asp
				85

<210> 7

<211> 94

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 7

Ser	Ser	Thr	Lys	Gly	Gln	Thr	Lys	Art	Asn	Leu	Ala	Lys	Gly	Lys	Glu
1				5					10					15	

Glu	Ser	Leu	Asp	Ser	Asp	Leu	Tyr	Ala	Glu	Leu	Arg	Cys	Met	Cys	Ile
			20					25					30		

Lys	Thr	Thr	Ser	Gly	Ile	His	Pro	Lys	Asn	Ile	Gln	Ser	Leu	Glu	Val
		35					40					45			

Ile	Gly	Lys	Gly	Thr	His	Cys	Asn	Gln	Val	Glu	Val	Ile	Ala	Thr	Leu
	50					55					60				

Lys	Asp	Gly	Arg	Lys	Ile	Cys	Leu	Asp	Pro	Asp	Ala	Pro	Arg	Ile	Lys
65					70					75					80

Lys	Ile	Val	Gln	Lys	Lys	Leu	Ala	Gly	Asp	Glu	Ser	Ala	Asp
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85

90

<210> 8
 <211> 79
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Chemically
 synthesized polypeptide

<400> 8

Glu Gly Ala Val Leu Pro Arg Ser Ala Lys Glu Leu Arg Cys Gln Cys
 1 5 10 15

Ile Lys Thr Tyr Ser Lys Pro Phe His Pro Lys Phe Ile Lys Glu Leu
 20 25 30

Arg Val Ile Glu Ser Gly Pro His Cys Ala Asn Thr Glu Ile Ile Val
 35 40 45

Lys Leu Ser Asp Gly Arg Glu Leu Cys Leu Asp Pro Lys Glu Asn Trp
 50 55 60

Val Gln Arg Val Val Glu Lys Phe Leu Lys Arg Ala Glu Asn Ser
 65 70 75

<210> 9
 <211> 103
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Chemically
 synthesized polypeptide

<400> 9

Met Thr Ser Lys Leu Ala Val Ala Phe Leu Ala Val Phe Leu Leu Ser
 1 5 10 15

Ala Ala Leu Cys Glu Ala Asp Val Leu Ala Arg Val Ser Ala Glu Leu
 20 25 30

Arg Cys Gln Cys Ile Asn Thr His Ser Thr Pro Phe His Pro Lys Phe
 35 40 45

Ile Lys Glu Leu Arg Val Ile Glu Ser Gly Phe His Cys Glu Asn Ser
 50 55 60

Glu Ile Ile Val Lys Leu Val Asn Gly Lys Glu Val Cys Leu Asp Pro
 65 70 75 80

Lys Glu Lys Trp Val Gln Lys Val Val Gln Ile Phe Leu Lys Arg Thr
 85 90 95

Glu Lys Gln Gln Gln Gln
 100

<210> 10

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
 synthesized polypeptide

<400> 10

Glu Ala Glu Glu Asp Gly Asp Leu Gln Cys Leu Cys Val Lys Thr Thr
 1 5 10 15

Ser Gln Val Arg Pro Arg His Ile Thr Ser Leu Glu Val Ile Lys Ala
 20 25 30

Gly Pro His Cys Pro Thr Ala Gln Leu Ile Ala Thr Leu Lys Asn Gly
 35 40 45

Arg Lys Ile Cys Leu Asp Leu Glu Ala Pro Leu Tyr Lys Lys Ile Ile
 50 55 60

Lys Lys Leu Leu Glu Ser
 65 70

<210> 11

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
 synthesized polypeptide

<400> 11

Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr
 1 5 10 15

Ser Gly Ile His Pro Lys Asn Ile Gln Ser
 20 25

<210> 12

<211> 14

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 12

Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Glu Ser
1 5 10

<210> 13
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 13

Cys Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln
1 5 10 15

Ser

<210> 14
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 14

Met Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln Ser
1 5 10 15

<210> 15
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 15

Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln Ser
 1 5 10 15

<210> 16

<211> 228

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Chemically
 synthesized nucleic acid

<400> 16

GAC AGT GAC TTG TAT GCT GAA CTC CGC TGC ATG TGT ATA AAG ACA ACC 48
 Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met Cys Ile Lys Thr Thr
 1 5 10 15

TCT GGA ATT CAT CCC AAA AAC ATC CAA AGT TTG GAA GTG ATC GGG AAA 96
 Ser Gly Ile His Pro Lys Asn Ile Gln Ser Leu Glu Val Ile Gly Lys
 20 25 30

GGA ACC CAT TGC AAC CAA GTC GAA GTC ATA GCC ACA CTG AAG GAT GGG 146
 Gly Thr His Cys Asn Gln Val Glu Val Ile Ala Thr Leu Lys Asp Gly
 35 40 45

AGG AAA ATC TGC CTG GAC CCA GAT GCT CCC AGA ATC AAG AAA ATT GTA 192
 Arg Lys Ile Cys Leu Asp Pro Asp Ala Pro Arg Ile Lys Lys Ile Val
 50 55 60

CAG AAA AAA TTG GCA GGT GAT GAA TCT GCT GAT TAA 228
 Gln Lys Lys Leu Ala Gly Asp Glu Ser Ala Asp TER
 65 70 75

<210> 17

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD_RES

<222> (1)

<223> Xaa is N-acetyl isoleucine

<220>

<221> MOD_RES

<222> (14)

<223> Xaa is serinamide

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 17

Xaa Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Glu Xaa
1 5 10

<210> 18

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD_RES

<222> (1)

<223> Xaa is N-acetyl threonine

<220>

<221> MOD_RES

<222> (8)

<223> Xaa is lysinamide

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 18

Xaa Thr Ser Gly Ile His Pro Xaa
1 5

<210> 1

<211> 70

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<210> 19

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Chemically
synthesized polypeptide

<400> 18

Thr Thr Ser Gly Ile His Pro Lys
1 5